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RIVER-SIDE REFLECTIONS.

SOME enthusiastic anglers aver that a true votary of their art can never be a bad man, the influences that surround the pastime being so genial. It is certain that to be a good trout or salmon angler, a man must possess a combination of qualities that go far towards the making of good men; and this may be inferred inversely from the fact that so many good anglers are most successful men of business. The angler must be thoughtful and earnest in his vocation, industrious, patient, and persevering. He must rise early, work late, and be ready to endure many hardships. He must handle his rod daintily, watch carefully over his tackle, and advance warily upon his game. He may rise early and trudge far, to find another man on his favourite cast; he may fish all day, get only one chance at a salmon and lose it by striking too slow, too fast, or too heavily; by a carelessly tied knot, or a faulty reel. When the salmon is fairly hooked, there is danger in the first wild rush and in the rapid return, in the whirl aloft and in the passing of the rocky ledge. No two fish act exactly alike when hooked, and no regular line of procedure can be followed; head, hands, and feet must all be on the alert for emergencies, and after an exciting chase, that may have taxed all a man's powers, and left his heart thumping in his throat, when the quarry is run done, and the battle seems won, the greatest care and patience must be brought to bear on the landing of the prize; for our angler learns by experience how the consummation of long-cherished hopes may be dashed from him at the last moment by a blundering stroke of the gaff, or an ill-guided gravelling of his exhausted fish. Thus, with its hopes and fears, there is rare mental training in the pursuit, with abundant fresh air and wholesome exercise to give the sport a keen relish.

It is with the finest tackle and the smallest hooks that most trout are caught, and it is not always an imaginary big fish that so frequently escapes. Alas! how many a shabby

dish of trout has been dubiously seasoned by the glowing relation about the 'fine large fellow' that had so nearly come to adorn the breakfast-table.

The enthusiasm of anglers is a quality little understood by those who cannot share it, and its attendant weaknesses have long been a standard subject of ridicule. When sensible men of mature years travel two or three hundred miles, to toil day after day, in and out of water like amphibia, cold, tired, and hungry it may be, for the mere chances of catching a few little trout which could be bought at a twentieth part of the cost; when he labours as he never labours during the rest of his life, till back and arms ache, and legs are weary laden with wet waders and unwieldy boots, which he has dragged about the river six or seven hours daily; when he has paid his gillie five shillings per day, and hotel expenses—including the right to kill salmon—at four times that price, and yet goes home, without having exercised the privilege paid for, still admiring his fine fishing-gear, and still dreaming of returning on the first favourable opportunity to go through a somewhat similar ordeal, other men not so affected may be excused for looking upon angling as a strange infatuation, and even hinting that if such vagaries were practised in every-day life, the man's friends should have him 'cared for.'

Such weaknesses, however, are not confined to anglers; they are widespread and deep-rooted in our race. The cricket and the football player exhaust their utmost powers in pursuit of their sport, forgetful of dangers that not unfrequently kill or maim companions; the bowler on the green, and the curler on the ice defying the wintry blast, run wild over the destinies of their bits of wood and stone; artists and authors coop and crumple themselves up late and soon, often breathing bad air, and blurring their eyes over 'miserable books,' many of them having as poor and rubbishy a basket to show when the day is done as the poor fishermen. Grave men who sit in parliament watching the framing of laws to

regulate the lives of millions of their fellows, grow feverishly impatient for the close of that important work when the 12th of August draws near, and soon after may be found in damp and dreary hags on Highland moors, 'despising wind, and rain, and fire,' watching more intently for the passing flight of the muirfowl, and more excited over a 'winged' bird, than they would be over a bill 'winged' in its final passage through the House of Commons; while by-and-by the *élite* of the counties turn out in red-coat gala costume, mounted on high-stepping costly chargers, to gallop in break-neck danger over fence and fallow, bog and ditch—a host of hounds, horses, men, and even ladies, in a wild craze over a poor frightened fox. All of which only demonstrates—as is done in many other fields—that there is a something in our natures craving for special excitements, and prone to occasional extravagances, refusing to be always subjected to the measured rules and sober gait of grave wisdom and cool philosophy.

To return to the angler, it is not by lake and river only that his enthusiasm breaks forth. When the season comes on, the disease is apt to permeate his whole life and conversation. On the slightest provocation, his talk is of rods and flies; while in travelling, the beauties of a country merge in fine trout streams and grand salmon pools. The conversation at table in many a country residence where angling friends are met, is amusingly and amazingly fishy; in an angler's hotel, it must often be beyond endurance to the traveller who cannot share the interest or find a pleasing study in the rapt enthusiasm of his neighbours. While the farmers' talk is of cattle, sheep, and turnips, the angling folks talk tirelessly of bull-trout, grilse, or grayling, how, where, with what, and when they are to be taken; of roads to lovely lakes, of losses and of takes; and it must be admitted there is a not uncommon tendency to tell 'big fishing stories.' Even counting-houses may be disturbed in summer-time; keen men of business forgetting for a while their interest in the markets, to run off in romancing raids across the Border. Our London humorist's description of John Bright behind the Speaker's chair at Westminster, showing off his new salmon-rod and stock of flies to Mr Forster, was a pardonable exaggeration, doubtless written by one who had dined and wined where fishing feats and flies had engrossed the talk of men from whom better things had been expected. As illustrative of the intentness of the angling mind on the details of the sport, here is a personal experience. Complimenting a Scottish fisherman one day on his success in landing a grilse and sea-trout in rapid succession from a small clear river, he smiled delightedly, and proudly held up a very mite of a hook, saying: 'Ay, there's the heuk; ye'd maybe hardly believe it, sir, but I lay waken all night composing that fly.' This lying awake o' nights, angling, designing, and planning how to circumvent fish, is no

uncommon thing; and many an angler's wife has had to rescue her husband from a nightmare struggle in deep waters with a monster salmon.

As to the poetical associations connected with the pastime, anglers are apt to get their passion and their poetry inextricably mixed together, trying hard to persuade themselves as well as others that the beauties of nature form a great part of the charm of angling. This is especially necessary when the sport is poor, as it too frequently is in these days when every water is so well occupied; but where the passion is fairly developed, the poetry is only the little foot-page attendant. The angler goes to the river with his mind so bent on capturing fish, that he commonly has little time to think about the beautiful. It is the old deep-set hereditary instinct for the pursuit of prey—inherent in most men from a long ancestry whose lives depended on it—that holds dominion over him; and say what we may, it is this 'grand passion' which makes angling so absorbing a pursuit. A Border farmer being told by a visitor that his hill-pasture seemed scanty for the stock upon it, replied philosophically: 'Ay, ay, that may be sae; but the beasts hae a grand view.' Views here, or views there, anglers, like cattle, can only be nourished on more permanent pasture. Yet there are breathing times in the chase when they may fully realise the glories that surround them.

It is the 28th day of May; a fine rain has fallen in the night, and a full flowing river is before us. The fish are not biting, however—no one can yet tell when they will, or why they do not when they evidently ought to, any more than they can explain why the lightning has affinity for ash more than for other trees; so we leave our friend, who is a most resolute man, to do the fishing, while we rest on the grassy bank to enjoy the surroundings. And what wealth there is to revel amongst. Sunshine and cloud are fleeting over earth and sky, with a life-giving breeze 'fresh as the morning,' rippling the broad swift-flowing river, and murmuring pleasantly among the trees in the wooded bank opposite, where the lively little fly-catchers warble joyously their snatches of song. It is one of those delightful days which make a Scottish summer haunt the memory from boyhood to age, the sunshine of which lingers lovingly in our hearts, sweetening like the fragrances of childhood's flowers—a whiff of which brings back from early days a train of happy thoughts—a golden treasure laid up against many rainy days; a day deliciously cool, bright and inspiring beyond anything we ever breathe in sunnier climes. Earth and air are full of joyous life, the woods are bursting into leaf, their banks are blue with hyacinths, and the west wind is laden with their sweets. The swallows flit in endless rounds athwart the pool, now a host, now for a moment gone; and now they speed in

rapid trains with wind and stream, till quick as thought they whirl up and backwards like dry leaves in a blast, their graceful flight beautiful to the eye, and their twittering song pleasing to the ear.

Surely all the swallows are having high holiday by the river to-day. Brown sand-martins, black and bronzed chimney-swallows spreading their long forked tails, and house-martins whose snow-white tail-coverts flash like glints of light dancing over the dark waters. The swift too is here, swiftest of swallows, cutting the air rapidly with its sabre-like wings—as though that were its mission and to be done quickly—uttering its shrill cry as it speeds on, quick of nerve and eye beyond our conception, capturing its airy prey while shooting onward sharp as an arrow from the bow and tireless on the wings of the wind. There are pied and yellow wagtails flitting and tripping about, anxious and busy, piping plaintively, full of family cares, and eager in providing for family wants. Quick and daintily they tippet over the stones, flirting their long tails and dashing into mid-air to seize the startled flies; yet quick as our eye is upon them, they are off across the river. Surely, to wild things all men possess 'the evil eye;' for, excepting 'bonnie Kilmeny,' or other beings whose orbs have been blessed by heavenly sights and only speak love to the wild and the tame, all wild animals seem to dread the gaze of man.

Yonder is a water-ousel on the rocky margin opposite, under an overhanging ash, dipping his white breast so persistently to the water, that one might suppose he was courtesying his best to his shadow there, in an 'After you, sir!' invitation to drink. The fine old thorn trees in the glebe above are whitening with 'the May,' and the mellow notes of the merle can be heard from one of them, mellow, but rather monotonous in their repetitions. Now there is a flight of gulls following the windings of the stream, and one after another, as they pass some floating object in the water, they stoop and beat the air for a while, on white up-lifted wings, hovering hawk-like for a moment, and then passing, each on its airy way. Now a sandpiper flits quick and silently up the river, noiseless enough when nesting, at other times a whimpering, loud-complaining bird—like some other bipeds—thinking it has got all the cares and troubles of life, and that the world ought to know it; and high above, the broad-winged heron sends forth his fitful skreigh, sailing away to some sequestered fishing-ground; a silent fisher, that sets himself motionless as stock or stone till some unwary trout or parr glides within the lightning-stroke of his great spear. A weird-looking bird as he stands on the big gray boulder by the silent pool, defective of ear, but with an eye quick as light; clumsy of flight when startled, but once aloft, sailing easy and majestic with outstretched shanks, over meadow and moor; privileged to fish many forbidden waters, waiting for no stated trains, but going and coming at his own sweet will by devious, ever-varied routes, and with no fear of complaints at 'The Heronry' of fishing too late o' nights. This is no fancy picture, but a sunny river-side experience which might be extended; but while we note the passing flight of many birds, our friend is catching fish, and a beautiful sea-trout has just flashed his

silvery sides before us. This, with the sight of our own basket empty on the green—like the covered dish served up to the old Border reiver with only a pair of spurs—reminds us it is time to mount and ride to catch a prey.

ONE FALSE, BOTH FAIR;

OR, A HARD KNOT.

CHAPTER XXX.—SIR PAGAN DINES AT HOME.

SIR PAGAN, for a wonder, dined at home on the day succeeding that which had witnessed his sister's fruitless visit to Leominster House. The baronet's habits, as has been previously mentioned, were eminently undomestic. He rarely partook of any meal, save breakfast, beneath the shelter of his own roof. But now he had come back, that very afternoon, as fast as steam could bring him along the iron way, from a three days' absence in the North; and being in high good-humour, he had taken pity on his sister's loneliness, and now sat opposite to her at his own somewhat shabbily appointed dinner-table, on that sultry August evening. Those two were not, perhaps, very congenial company to one another. Brothers, as a rule, have not much to say to their sisters; though nowhere, when involved in money troubles, or crossed in love, do they find a confidant so loyal and so patient as a sister is proud to be. On this occasion, Sir Pagan was unusually talkative.

'Knavesmire,' he said more than once, 'didn't turn out half-bad—not half-bad; might have been better, though; but I felt, when I left York, as if luck was going to change with me.'

This poor simple Devonshire baronet had a half-heathen belief in luck, akin to the Roman's fatalistic faith in *Diva Fortuna*. He had just returned from a great coursing contest in the North, and the qualified success which he had met with seemed of good augury to him.

His sister knew no more of coursing matches and racing events than she did of mathematics. But she felt that she ought to care for the pursuits that interested her brother so much, the more so as Sir Pagan was so kind and lenient, in his rough way, to her. And she remembered the sleek, slender greyhounds at Carew, and how gratefully they had looked up at her, with their glowing hazel eyes, when with her soft hand she had caressed those intelligent heads of theirs. Even now, old Dart, the grand black greyhound, too old for moorland scampers, was dividing his attentions between his master and the gentle girl who had patted him and talked soothingly to him many a day in far-off Devon.

'I wish, brother,' she said, 'that Prince Arthur—King Arthur, is it?—had won the Cup.'

'He didn't do it; but he ought; and if the judge hadn't been a blind old buzzard, he would have seen that the other dog didn't run fair in that last double; and there were hundreds on the ground who thought like me,' returned Sir Pagan, as earnestly as if life and death depended on the observance of technical rules by a set of swift greyhounds contending unconsciously for the profit of their owners. 'But,' added Sir Pagan, rising from his chair, 'it wasn't, as I said, half-bad. Prince Arthur got a second place, if

he got no more; and Weston, my trainer, you know—a deep fellow, Weston—feels certain for the great prize next month on the Chester Roodie. Anyhow, we'll hope so.—But sit still, my dear, sit still.'

And his sister did sit still. She was used now to her brother and his queer ways, one of which was that, when he had to think, it seemed incumbent on Sir Pagan to jump up and walk about the room with quick strides, as he was doing then. It really did appear as though the baronet's sluggish brains could not work unless his strong muscles were in motion. It was after dinner by this, and the frugal dessert, which nobody wanted, stood uselessly on the table; but Sir Pagan's claret glass was more than half-full, and he had swallowed but very little of the ruby liquid in the decanter before him. There was something, clearly, on the baronet's mind. He paced frowningly to and fro, like a man nerving himself for a difficult or painful task, and at last said, awkwardly enough: 'Now, my dear, blood's thicker than water, and I, I hope, remember it; but—'

'But—is it, Pagan, that you are tired of having me here?' asked his sister in alarm, as he hesitated to finish his speech.

'No, no; confound it! no—not such a brute as that,' stammered out Sir Pagan, blushing crimson. 'No. What's mine, while there's cash or credit, is yours as much as it is my own; or hers either, for that matter,' added the baronet vaguely. 'What I did mean was quite the contrary, sister. Fact is, I've netted a trifle of money, after settling scores with Weston, and paying up an IOU or two. And it must be so unpleasant for you to go on here in town without a shilling in your purse, and—so you are as welcome to my winnings, I assure you, as ever I made any man welcome to a glass of sherry, or— Stop!' he said, after a moment of self-communing. 'Yes, by Jove! we had better say, half the sum for you, half for me—share and share. But I want you not to be pinched.'

Poor, kindly, illiterate gentleman that Pagan Carew was, all his practical culture had taught him the lesson that cash was hard to get and harder to keep; and he felt the voluntary abandonment of a handful of gold and notes as others would the loss of their lifeblood; but he had been thinking seriously of his sister's helpless condition, all the way from York to London, and hence the unwonted liberality of his proffered aid.

His sister thanked him gracefully and gently, as was natural to her, as soon as she had quite grasped his meaning, imperfectly expressed. 'But I want nothing from you—no money, I mean, dear brother,' she said; and Sir Pagan instantly felt a sense of relief that he did his best to hide, but very lamely; for he was clumsy in all things except the handling of bridle, fowling-piece, or trout-rod.

He sat down again, and emptied his glass with an air of serene satisfaction. In truth, he was one of those men who are capable of a sacrifice certainly, but who would make but ungainly martyrs at the best. 'I really did not know you had anything at all,' he said presently.

'I should have been obliged to throw myself

on your bounty long ago, Pagan, had it been so,' his sister answered; 'but I had seventy pounds in my purse when I—left Castel Vavr, and most of this little fortune I spent, with Mrs Tucker's help, in buying what was necessary and renewing my wardrobe, since all I brought from Egypt was left behind at the castle.'

'I thought that starched, stiff old Lady Barbara had sent you your luggage,' blurted out the baronet, tapping with one weighty finger on the table.

'Not my luggage—not mine,' returned the sister. 'The trunks she sent remain up-stairs unopened, for they were marked with the name of Miss Carew. I could not touch the things, for they were Cora's, not mine.'

'Not touch your own things!' exclaimed the baronet, with an honest surprise that he could not repress; and then, reddening, he said: 'Pooh! nonsense. I don't profess to understand it all. But after all, my lass, you have a little left.'

'More than I want for pocket-money, at present. Twenty pounds,' answered the girl, smiling.

'But surely,' resumed Sir Pagan, cudgelling his memory, 'there must be still, out of Aunt Catherine's legacy, five hundred pounds lying in the Exeter bank to the credit of Cora Carew. One scrape of a pen!—'

'Hush, brother, hush!' cried out the girl, her fair face all in a flame with rising colour. 'Never could I meddle with the sum you speak of, were I starving and an outcast, for it is hers. I could not sign my sister's name.'

Sir Pagan made a wry face, as if his newly-poured bumper of sound claret had suddenly turned sour. 'Pshaw—rubbish!' he retorted, almost irritably. 'I wish, with all my heart, you would give up this useless harping on the same string. If you and she cannot get on comfortably together, as it seems—'

'But, brother, do you not believe that I am Clare—that I am Marchioness of Leominster?' the girl exclaimed, so eagerly as to make him wince.

'Believe it! Bother it—I'd rather not believe anything, thank you, one way or the other,' ejaculated the unhappy baronet, pushing his chair back, and sweeping the dark hair from his swarthy brow. 'It is a most confounded mess, as women's quarrels generally are, so far as my experience goes; and I'd as soon take a hornet's nest in my bare hands, as be mixed up in it, I give you my word. I believe nothing, for good or for bad, and I don't intend to. I believe nothing, I say.'

He was pacing to and fro now, in a state of the utmost discomposure; but it was quite plain that he meant what he said, and that he considered the neutral attitude which he had schooled himself to adopt, as a very stronghold and place of refuge.

'If you will not believe me, at least you are not sorry, I hope, to have me here in Bruton Street?' asked his sister with a sad smile.

'That I am not, my dear,' replied the baronet, heartily enough; for now he felt himself, so to speak, treading on firmer ground, and hospitality

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was one of the simple virtues that he had in his neglected youth been taught to prize, as an Arab does. 'You are my sister, at anyrate. There's no doubt of that, I'm glad to say. And you do brighten up this dingy, dreary old rat-hole of a house, which I wish was a livelier and a better home for you than I am able to make it. I may be rough—always was—wasn't I, Dart, old fellow!—but I mean well; and if I can be of use any day, just you let me know. I must be going, though, soon,' he added, with a glance at his watch; 'for I promised'—

What Sir Pagan had promised, or with which of his bachelor friends the appointment was made, signifies little. At anyrate, a quarter of an hour later he was treading the Pall-Mall pavement, bound for his club; and his sister had crept slowly back to the solitude of the darkling drawing-room up-stairs. Sir Pagan had heard nothing from her lips as to her unsuccessful visit to Leominster House.

(To be continued.)

MY FIRST CHAMOIS.

BY HIS MAJESTY OSCAR, KING OF NORWAY AND SWEDEN.

TRANSLATED BY CARL SIEMERS.

THE gay and interesting imperial city of Austria invites us to stay! Its palaces bask in the fullness of a summer's sun, and the Prater is crowded with a varied assemblage, here gathering to listen to the intoxicating strains of a Strauss orchestra, there separating into knots around the innumerable cafés. To the foreigner, Vienna has much of interest, many pleasures to offer, and still we have to say farewell after a too short stay. We are tempted away to another land, towards the snow-covered peaks of the Alps, far from the whirl of the capital.

A rare opportunity had been offered us to take part in a chamois hunt in the Tyrol, an offer which we cannot resist; and the following night finds us on the road travelling for twelve hours in a railway carriage, where we get no sleep. At the station of Holzkirchen, in Bavaria, we left the railway for vehicles of lesser speed, and journey in the bright morning past Tegernsee Castle, belonging to Prince Charles, and situated on the shore of a mountain lake of the same name, with water clear as crystal. Upwards, upwards, along the narrowing valleys to the famous Wildbach-Kreuth, the customary place of rendezvous for the chamois-hunters in these tracts. The Prince had himself arranged the chase, in which fourteen or fifteen gentlemen participated; but he himself, advanced in years, no longer followed his favourite pursuit, although some of his suite were bold and experienced alp-hunters. Besides these, and four Swedes and Norwegians, including myself, the party consisted of members of the Bavarian nobility, the *corps diplomatique* at Munich, officials, &c.

In the afternoon of August the 16th, most of the sportsmen proceeded leisurely up the Boden Alps, and met at a *chalet* to pass the night, so as to commence the morrow's exhausting chase with invigorated strength. At half-past one in the morning, after only a couple of hours' rest, we left

our pretty residence of Kreuth, and, after a ride of about two miles, reached the dark Wolfravine 'Wolfschlucht,' to which is attached many strange legends, and here our guide, the alp-hunter Hohenadel, met us.

I wish I could give a portrait of this splendid figure, with its sober energy and robust health. Hohenadel is a giant six feet three inches high, with a pair of the broadest shoulders I have seen, and with a noble countenance from which decision, boldness, and thorough honesty shine forth. He was born in a lowly cottage among the mountains, and his whole life has been passed among the glaciers and ravines of the lofty Alps. It has been healthy and free from any artificial nurture; it has taught him to play with death in a thousand forms of danger; it has stamped his whole being with the impress of nature's greatness and potency. He speaks but little as with his shaded lantern in one hand, his alpenstock in the other, and his gun over his shoulder, he trudges before us on the mountain brow, inspiring us, however, with a confidence which a thousand words could not have awakened.

Thus we wandered for a long time in silence. Serious, almost dark thoughts rushed upon us; the jet black Alps rising on both sides of us, on our right so close as to permit us to touch the clammy rock; on the left again, some distance off, and below us—we hardly dared attempt to ascertain how near—was the yawning abyss, while the torrent below spoke with a gloomy voice, which gradually died away as we proceeded upwards on our lonely path. Above our heads the silent stars twinkled in the azure sky, while shadowy clouds moved erratically round the lofty peaks, or descended along the giant forms of the mountain slopes.

It now became necessary to follow our guide more closely. To lose one's footing now would be fatal. We therefore journeyed on with care and caution until we grew a little accustomed to the strangeness of our situation under the wing of night. An hour goes by, and the first gray shadow of dawn creeps along the mountain side. Unfortunately, the clouds rise simultaneously, the sky becomes overcast, and during the greater part of the morning a fine, chilling mist falls, which also mars the hunt. In course of the day, however, the weather improved and the sun broke through. We had walked without cessation, and the clock had barely turned four, when we were on the road up the Bodengebirge.

Vegetation here ceased by degrees; long and luxuriant alpine grass and shrubs clustering in the mountain clefts. For an hour more we climbed some very stiff slopes and reached at last a mountain ridge, some six thousand feet above sea-level, along which we were then posted, where big stones or clumps of shrubs permitted, with a distance of a hundred to two hundred feet between us; the ridge being in some places so sharp and steep that two persons could hardly find sufficient space at one post. It was with some difficulty one could keep his position, immovable and gun in hand, but more difficult still it must have been for any one suffering from giddiness.

The picture unfolded before our gaze was one of the grandest. Below us some fifty yards a ravine, through which the newly-melted ice-waters from the glacier rush with a loud roar.

On the other side a plateau, somewhat longer than the ridge we stand on, abruptly broken to the left, while on the right the mountains rise suddenly, after sinking softly into a copse-covered glen, to a height of some seven thousand feet, where the snow shines like burnished silver. Cold rain and warm sunshine alternate from time to time, and the colouring, the light and shade on this unrivalled picture, shift with them. Surprisingly picturesque appear also the alpine hunters in their hats with green feathers, their gray shooting coats, their naked, sinewy legs, scorched by the sun, their close leggings and laced boots. They keep the gun lightly slung over the shoulders, but it is with the quickness of lightning that it finds its place for the shot, while the long alpenstock carried in both hands serves for support when wandering down or by the side of the precipitous mountain. But, should any game appear, or the wanderer hear any suspicious noise, in an instant the alpenstock lies against the shoulder and the hands grasp the rifle.

These sons of the Alps have a faculty of discerning the approach of game which is astounding; they possess the noble and intelligent nature of the hound. The chamois is hunted in two ways, either by a kind of 'drive' or else by 'stalking.' Our hunt was organised in the first manner; still, one must not imagine this to be merely 'beating the woods;' the chamois is easily frightened, and so fleet—*flüchtig*, as the Germans term it—that this would be out of the question. Some five to six men cover the whole mountain tract with a few hundred yards between them, sometimes more; they walk cautiously, but straight, towards the hunters, giving the latter the benefit of the wind; they must not, however, make any noise, or this would frighten the animals beyond all measure, and force them to run in hot haste down or up the most break-neck places, and the chase is then spoilt; it is necessary, then, that the beaters should possess as much skill and caution as the hunters. Long, therefore, before the former come in view, if the drive has fortunately been successful, smaller and larger herds of these light-footed inhabitants of the Alps will appear.

There is something indescribably striking in their bold movements as they spring from rock to rock, from knoll to knoll, over the yawning crevice. Suddenly they halt in their wild flight down the mountain slope to listen. Then they again speed on and disappear. Now they reappear, they approach, they are nearly within range; no, they are again a thousand yards away.

Lovely creatures! Why does the hunter lurk with the deadly bullet to cut short your careless gambols, in the presence of such wonders of the commanding manifestation of the Creator's omnipotence? That is the question the sportsman involuntarily asks when, for the first time, he sees these graceful animals free from all restraint; but the next moment he fires, and a 'miss' is oburgated as loudly as though he had never been touched by a sting of pity.

The other way of hunting, namely, stalking, when one steals upon the animal, is far more dangerous, and but rarely results in any success, while, on the other hand, it requires of course

less preparation; it is, however, not advisable to be less than three when undertaking this sport, especially if the sportsman be not acquainted with the difficulties and dangers which may be encountered, as one's life may easily be brought into danger, and is perhaps only saved by the courage and presence of mind of a companion.

Here is an account which will give an idea of the hazard attending this sport, and also of the marvellous resolution of the alp-hunters.

During one of my travels in Switzerland I once obtained an excellent guide from Meiringen, across the Bernese-Oberland, who had in his younger days been the boldest and most successful chamois-hunter in the place, but who had subsequently for ever renounced this his dearest pastime on beholding his bosom friend fall before his eyes into an immeasurable abyss. He related, among other things, that this friend and himself had once, when they were mere lads, started on a hunt. For several days they stalked without success, which seems to have irritated them to such an extent as to make them determine they would not return without some spoil. At last they tracked a splendid chamois, hemmed between two arms of a glacier.

But how to get at it! To approach from above or below was utterly impossible, as only a long, sharp ice-covered ridge led to it; so they linked themselves together with a strong rope at their belts, and commenced to crawl along the naked 'comb,' the eldest first and the youngest after, a distance of forty feet. But the break-neck venture soon overpowered the less experienced of the two; the overstrained brain yields to terror, and with his courage his presence of mind disappears.

A cry of terror, and he falls! No rescue seems possible; a parting sigh to the hearth he left, and he faints. Only One knows how long he was unconscious. At last he revived. Marvel! he was still hanging by the side of the mountain, a couple of yards under its edge, and with the saving rope round his waist. He listened with strained nerves. Was he not deceived? Shouts in a well-known voice greeted him. 'Do not be frightened, I am balancing you.' And so he was. Quick as lightning had his comrade not only perceived the danger, but comprehended it in its whole scope, and with marvellous presence of mind, flung himself down the other side. And there they both hung!

The situation is, I think, easier imagined than described. However, at length, after many efforts and infinite terror, the two friends at last reached the top again; and once more safely reached their homes, thankful to heaven for their deliverance.

To resume my own narrative, the first drive brought no luck to me, as no animal came within range; still, I saw a dozen, and crept as near to the verge as I dared. Three animals fell in other quarters, and the reports of the guns echoed among the mountains, borne to and fro with long cadenced resonance, while the Alpine eagles, scared from their nests, soared and wheeled high above us.

After a few minutes' rest, we ascended higher. I was now placed on a steep slope—so steep, in fact, that it was only with the greatest effort I

managed to cling to the mountain. Hohenadel followed, holding my other gun—well, I am afraid I must make the humble confession, holding me also, until I managed, by means of my alpenstock, to obtain something like a footing.

The drive now commenced from another quarter. The same glorious and grand view, the same solemn silence unbroken by any noisy horns or reports. After half an hour's anxious waiting, when hope had nearly vanished, I suddenly heard a rustle below us behind a big stone. We listen again with doubled attention in death-like silence. No, nothing! Two moments more, two long moments of expectation—and lo! a splendid chamois creeps softly forward below me, its whole attention being fixed on the drive in the valley.

'Attention! Aim low,' whispers Hohenadel. 'Fire!' The animal stumbles, the left shoulder is hit, but too low; another shot in the back of the flying deer, and it stands overwhelmed with pain, panting with terror, and undecided from whence the shot came. 'Quick here with the other gun!' And by a third shot at a distance of a hundred yards, the animal falls hit in the shoulder, I believe the right, as he turned a little in the flight. I have still a ball left; the hunting fever seizes me, and to a certain extent deprives me of coolness. Throwing the alpenstock aside, and using the gun as a staff, I begin to run down with great speed. Luckily, something on the ground, whether a shrub or a stone I do not recollect, covers me just at the very moment I require it, and thus I get a fourth shot at him. The ball goes through the heart, and the horn sounds *Alles Todt*, which is repeated and re-echoed.

This was the only animal shot in the latter drive—we had four in all; mine was the largest: 'Ein capitaler Bock.' The head, with its magnificent and gracefully curved horns, its pointed ears, its vigilant eyes and shapely nose, now adorns my home. My eye rests on it often with keen satisfaction.

TWICE LOST.

A TALE OF DOUBLE CONSCIOUSNESS.

IN FOUR CHAPTERS.—CONCLUSION.

'Miss LINWOOD,' the servant said to Clinton, 'was engaged in packing; she would be downstairs before long, and hoped that Mr Clinton would remain to tea. A letter had come for him from the solicitors.'

Clinton opened it. It contained but a single line from Mr Keane, and an inclosure, which proved to be a letter from Mr Warren to the firm. The essential part of the letter was as follows:

'Mr Clinton having thought fit to intimate that a will exists, and to suggest that I am a party to its disappearance, would find occasion to repeat this slander, if I were to take immediate possession of the house in which are the papers of the deceased. I therefore desire you to retain possession until a thorough search has been made, and you have satisfied yourselves that no will is concealed anywhere upon the premises. Any proceedings that you may think proper to take in pursuance of the insinuation made by Mr Clinton, I shall be ready to meet; if none should

be taken, I myself shall adopt measures to compel him to retract and apologise for it.'

'He has the will,' said Clinton to himself, 'and makes a show of generosity at a cheap rate.'

The barrister rang the bell, and summoned the detective who had been constantly in charge of Andrew since the disappearance of the will, though the latter hardly seemed to be conscious that he was under restraint. Him he directed to use his utmost efforts to intoxicate the old man, and in that state to recall his mind to the history of the errand which had terminated so disastrously. Having given this order, he sat down to read the volume in his hand and await Eva's leisure.

She came presently, and greeted her defeated champion with an affectionate and grateful warmth which at least assured him of her full conviction that the loss of her cause was due to no fault of his. She was grave and sad at the prospect of quitting the home of her childhood—the only one she had ever known; and Clinton, to divert her mind, drew her attention to the circumstances of the trial. He explained to her the reasons which made it impossible for the English law to recognise her father's second marriage; the nature of the law of domicile, on which the validity turned; and the history of Lord Lyndhurst's Act, which by rendering such marriages valid in the past, but void for the future, had given them a moral validity, of which, in her social position, she would feel the benefit. As Eva was intelligent enough to feel deeply the stigma thrown upon her by the legal invalidity of her mother's marriage, she was cheered to find how very narrow and technical were the grounds on which it was impugned; and Clinton was gratified to perceive that, instead of impatiently pronouncing herself unable to understand a legal question, she followed with attention and comprehension his explanation of the law affecting her case.

From this they passed to Mr Warren's letter; and Eva was proceeding to question Clinton concerning the arrangements made for her future, when he was relieved from no little embarrassment by a knock at the door and the entrance of the detective.

'Will you come, sir?' whispered the latter, with an eager countenance. 'You can conceal yourself just outside the door. I had the greatest difficulty to induce him to drink; for he said he had ruined his mistress by drinking, and never would taste spirits again; but when I had persuaded him, as he has scarcely eaten or slept for weeks, a very little overcame him. So now he seems to have forgotten all that has happened since, and is telling me the story just as if it had happened yesterday.'

Clinton eagerly followed him, and concealed himself in a store-closet, the window of which over-looked the pantry where Andrew and the detective were seated. The latter returned to his place, and induced Andrew to resume his narrative.

'So I says to the villain: "No; my master was not such a fool; he knew what you were, and he would not leave Miss Eva at your mercy. So he had made a will, as you will find to-morrow; and not a farthing of his money will you ever see." So he tries to question me about

it, friendly-like, and to know where the will was; but I wasn't going to tell him that I had it in my pocket. So, says he: "I only want what is my own; if you can show me a will, I shall be ready to give up my claim." But I saw through the old fox, and I said: "You'll give it up, no doubt of it, to-morrow, when you find you must." So when he saw he could get nothing out of me, he said: "You had better go home, Andrew, and get to bed;" pretending to think as I was drunk, though I was as sober as you see me. So I came home—here Clinton listened with redoubled attention—and then I found that Mr Clinton was gone away, and Miss Eva was gone to bed. So I think to myself: "That Mr Warren's a lawyer, and would stick at nothing; suppose he should have the house robbed while we are asleep, now he knows the will is here?" So I took and hid it where no one would look for it, and where robbers would never find it, if they should search all night; and then I went to bed.

'Well, and where was this hiding-place?' asked the detective. 'Have you put it in the plate-chest, or among the china, or where?' naming the most unsafe of hiding-places, in the hope that, eagerly repudiating such an imputation on his good sense, Andrew would betray his secret. But he was now on his guard, and though so completely intoxicated as to have lost sight of all the events of the period that had elapsed since the hiding of the will, his mind retained a firm grasp of the idea which had then possessed it, and which had returned in full force with the memories of that eventful night. He answered with a smile of drunken cunning: 'No, no; I shall not tell you that. How do I know but you may be one of Warren's men? I will tell no one till Mr Clinton asks me for it.'

Where the detective sat, he could catch Clinton's eye, while Andrew had his back to the closet-window. At a sign from his employer, the former rose, and with a jest at the old man's obstinacy, left the room. There was no time to be lost; for the fumes of the liquor had overpowered a nervous system exhausted by sleeplessness and fasting, and Andrew was evidently lapsing into unconsciousness. Clinton took his resolve in an instant; he walked into the pantry, and addressing Andrew in a matter-of-fact manner, studiously concealing his excitement and anxiety, he said: 'Did you not hear me ring?'

'No, sir.'

'Where were your ears? I want the will; Mr Keane is here, and I must give it to him immediately.'

Andrew stared at him for an instant; then evidently made a desperate effort to recover and recollect himself. Clinton felt himself almost choked by the beating of his heart; but commanding his voice with difficulty, said: 'Come, let me have it at once. Have you got it all safe?'

The peremptoriness of this question recalled the remembrance that was very nearly fading again from Andrew's stupefied brain. Taking a chisel from a drawer, he advanced towards the fireplace, answering in a voice which the habit of respect strove to render clear and steady, in spite of the intoxication which he instinctively laboured to conceal: 'Ay, very safe, sir. I was afraid of

what Mr Warren might do, and I thought he would never look for it under the hearth-stone.' And, stooping down, he strove to lift the slab. Clinton thrust him aside, snatched the chisel, and inserted it at a part where the plaster had been removed, and a chink was visible between the boards and the stone. With some effort he raised the slab. There, close at his feet, lay the missing packet, with the seals unbroken. The Will was recovered!

Mr Warren behaved better than had been expected. Clinton's first step was to write to him, apologising for his suspicions, and stating that the will had been found. After inspecting it, in presence of Mr Keane, Mr Warren withdrew his claims, and suffered Eva to take possession of her inheritance without further molestation. The will appointed Mr and Mrs Claverling guardians to the heiress; and the former, together with a business connection of Mr Linwood's, trustees of her property. And, at the testator's desire, the Claverlings took up their abode in their ward's house, so that Eva remained in her old home, under the motherly care of a friend whose worth and affection she had learned in her time of trouble to appreciate as they deserved.

Some weeks had elapsed since these arrangements had been completed, and Mrs Claverling and her ward were once more sitting alone by the firelight in the library where we first saw them. Eva was still in mourning; but the pale face had regained its soft and delicate colour, and its expression, though pensive, was no longer unhappy. 'I wonder,' she said to her companion, 'after a long silence, when Mr Clinton will come again to see us? He has never been here since the business of the will was settled, and you came to live here.'

'He has only been asked once, and then he was engaged.'

'But he used often to come and see my father, without being invited; and when my lawsuit was going on, he came nearly every other evening.'

'You see there is no more business to bring him here.'

'But he did not always come on business; he used to come and spend an evening whenever he had one to spare. Mrs Claverling, can I have done anything to displease him? If I have, I shall be so very sorry; he did so much for me.'

Mrs Claverling had a very distinct opinion as to the reason of Clinton's protracted absence. She was no match-maker; but she could not help feeling a strong and somewhat romantic interest in the love which she was sure the young lawyer felt for her ward, and saying to herself that it would be a great pity that a morbid delicacy should interfere with its avowal. 'She will never find a better husband,' thought the good lady; 'and with her fortune, she has every chance of finding a worse.' Thus thinking, she spoke, letting fall the hint which, as she believed, was alone wanting to turn the course of affairs: 'I think, Eva, that Mr Clinton came without an invitation when he knew that we had need of him. Now that it is not so, he is too proud to come without being asked.'

'Ah, ask him then, dear Mrs Clavering,' exclaimed Eva. 'How ungrateful I must have seemed to him; I, who was so glad to see him when I was poor, and seem to forget him as soon as he has made me rich!'

Suddenly Eva coloured, turned away her head, and was silent. Mrs Clavering readily guessed what thought had entered her mind, and was content to let her alone. If Eva did not care for Clinton, she did not wish to interfere. If she did care for him, the first evidence of this which her inexperience and innocence could not fail to afford, would be sure to overcome his scruples. He might sacrifice his own happiness to his pride, but not hers.

Clinton was invited; and Mrs Clavering must have managed, without indiscretion, to word her note in a form more pressing or more attractive than before; for, despite his own resolutions, the young barrister accepted the invitation. Mrs Clavering, while careful not to embarrass Eva by observation, noticed that evening the extreme elegance and prettiness which an exceptional care had given to her appearance, and the nervous agitation which made her little hands tremble till she laid down her work, and took up a book to screen herself from attention and from conversation. When the bell rang, however, Eva laid down the volume, and made an evident and resolute effort to regain her composure. It was fortunate, or perhaps considerate, that Mrs Clavering claimed Clinton's attention for a minute or two on his entrance with reproaches for his neglect, which he parried by pleading the increase of business that had almost overwhelmed him. 'I am a slow worker,' said he, 'and as yet I dare not be careless. I must make up for my inexperience by giving double attention to every brief, if I would keep the good fortune that has flowed in upon me.'

He passed on to Eva, who had risen and stood with downcast eyes and half-averted head. She held out her hand, and Clinton felt it tremble as he took it in his. 'I am afraid you are more seriously displeased with me, Miss Linwood,' he said, in some little surprise at his reception; for Clinton was as little of a coxcomb as a clever and successful man of his age well can be; and he attributed Eva's manner to displeasure at the length of his absence, and perhaps at the suddenness with which he had withdrawn from her society. 'I should be very sorry to think that I had been so eager in availing myself of fortune as to seem to neglect the person to whom I owe it all. Pray, forgive me, and believe that if I have been busy, I have not been forgetful or ungrateful.'

'Ungrateful?' Eva murmured. He had not released her hand, nor had she withdrawn it.

'You made my fortune, Miss Linwood. Since I had the honour of conducting your case, I have obtained in three months more work and much more money than in the last three years. I have to thank your generous confidence for all this.'

'Eva thinks you have been very long in returning your thanks,' said Mrs Clavering archly.

The girl looked up, in eager deprecation. 'I am sure Mr Clinton owes me no thanks. But I owe him everything; and I should have liked to have told him sooner how comfortable I am,

and how I thank him for it—for all.' She paused, and her eyes o'erbrimmed with tears.

Clinton started, in manifest agitation; and Mrs Clavering quietly left the room.

When she returned, half an hour later, Clinton stood by the window, which looked out upon a quiet, green, shady lawn and garden; and Eva was beside him, her hand on his arm, and her fair head resting against his shoulder.

'Mrs Clavering, you will have to complete your own work, by persuading your husband that I am not too unfitting a suitor to his heiress-ward. Nay—if you did not mean this, you should never have asked me here.'

'I asked you because I knew you would not come unasked; and because I thought it hard that Eva's fortune should stand in the way of her happiness. Do not fear. Mr Clavering will be very glad to know that his ward is safe from all the perils of an heiress's position, and married to one who found in her wealth not an attraction but an obstacle to his suit.'

'Is it true,' said Eva, as she parted from her lover in the hall that evening, 'that you meant to give me up because I was rich, though you loved me when I was poor?'

'I loved you, darling, poor or rich. But'—The question was not easy to answer.

'Ah, Everard, it was very unkind. Could you believe that my fortune—which I owed to you—would change my thoughts of you? Or could you, so proud, so independent, be afraid of what others might say, and willing to sacrifice me to that fear?'

'It would have been sacrificing you, then, my Eva?'

'Ah, yes! If I had thought that money could stand between us, I should have rejoiced with all my soul when the will was lost, and broken my heart when it was found.'

RATIANA.

A CORRESPONDENT has kindly favoured us with the following remarks relative to the getting rid of rats.

In your *Journal* number for the month of April, you gave some valuable information from a correspondent respecting a good remedy for getting rid of rats in a dwelling-house or elsewhere. I think I can state a much more effective remedy, very simple, and one that I have tried most successfully.

It is well known that when once rats have obtained a firm footing in a private house, or in any other buildings, such as barns, outhouses, &c., it is a most difficult thing to completely dislodge them, and they continue, sometimes in spite of all attempts to exterminate them, to make frightful inroads into domestic peace and happiness, and into the luxuries and other eatables stowed away in the larders. I came to my present residence in 1875. It is a very old but very comfortable house. Soon after I had commenced arranging my furniture and otherwise placing my house in order, I found, to my intense disgust and annoyance, that the place was infested with rats. Nearly every room on the ground-floor gave alarming indications of the presence of rats during some part of the day. Even the drawing-

room was at times a rat-haunt. One evening, as my servants were sitting comfortably around the kitchen-fire, out came three gigantic rats. Having carefully looked round the kitchen, the vermin came towards the fire; and upon the servants moving their chairs, they scampered off, only to return the next evening. One morning, when coming down-stairs to breakfast, I found the baby's toy rabbit, made of real rabbit-skin, literally torn to pieces, and the bits scattered all about the front staircase. Nothing but a rat could have done this, as the rabbit was perfect a few hours before, and the cats had been turned outside the house for the night. Dogs and cats were quite unable to exterminate these pests.

At last it became so serious, that I thought I would try tar as an experiment. Rats are wonderfully clean animals, and they dislike tar more perhaps than anything else; for if it once gets on their jackets, they find it most difficult to remove it. Now, I had heard it mentioned that pouring tar down at the entrances of their holes was a good remedy; also placing broken pieces of glass by their holes was another remedy. But these remedies are *not* effective. The rats may leave their old holes, and make fresh ones in other parts of the house; they don't, however, leave the premises for good.

I thought I would try another experiment, one I had not heard of before. One evening I set a large wire-cage rat-trap, attaching inside a most seductive piece of strongly smelling cheese; and next morning I found, to my satisfaction, that I had succeeded in trapping a very large rat, one of the largest I had ever seen, which, after I had besmeared with tar, I let loose into his favourite run. The next night I tried again, and succeeded in catching another equally big fellow, and served him in the same manner. I could not follow these two tar-besmeared rats into their numerous runs, to see what would happen; but it is reasonable to assume that they either summoned together all the members of their community, and by their crest-fallen appearance gave their comrades silent indications of the misfortune which had so suddenly befallen them; or that they frightened their brethren away, for they one and all forsook the place and fled. The experiment was eminently successful. From that day in 1875 till now, 1883, my house, ancient though it is, has been entirely free from rats; and I believe that there is no remedy equal to this one, if you can catch your rat alive. They never came back to the house again.

In conclusion, let me say, Never use poison. This remedy is almost worse than the disease. If poison be used, you may find yourself in the same sorry plight a friend of mine once found himself in; he had to take up all his dining-room flooring, on account of a frightful odour issuing therefrom, and found sixteen dead rats underneath. Besides, poison is dangerous lying about; it might be taken by favourite dogs or cats.

Another correspondent sends us the following touching anecdote: We had been troubled with the company of a pair of fine large rats, and to our cost we knew they took their refreshments on the premises. Their visit having lasted a fortnight, we thought it advisable to take means to discontinue the acquaintanceship. Last

Monday night we set two traps, thinking to catch them both at once, as they had often been seen together, frequently pilfering off the same dish. We succeeded in catching them, but in a most unexpected manner. The male rat in the morning we found alive in the cage, his better-half lying dead on the floor by the side of the cage, evidently having died of grief. Not being able to call to mind a similar case, I send this, thinking it may interest some of your readers.

The following curious anecdote has been sent to us by a gentleman residing in the north of England.

'The other day,' he says, 'as I was strolling along the brook-side, taking a quiet afternoon constitutional, I noticed a dead dog in the middle of the brook, the water running down at the time not being nearly sufficient to cover it. There is nothing so unusual in the sight of a half-putrid carcase in either brook or pond as of itself to attract attention, so I suppose it must have been some motion in the mass that unconsciously struck the eye; at anyrate, while I was looking, an old rat left the rotting carcase and made off down the watercourse at a rapid rate, looking neither to right nor left. He seemed so thoroughly on business, that I determined to upset the old fellow's arrangement, and see whither it would lead. Accordingly, I cut off a hooked thorn-stick, made my way from stone to stone to the dead dog, hauled him up high and dry on to the bank under a bush, and waited. Scarcely was all still again, when the old rat returned, and in his train came twenty-four more rats straight to the spot where the dog had been. Had I known the consequences, it had been there still; for no sooner did the poor old fellow find the treasure-trove gone, than he set up a most piteous scream, and darted up the brook like an arrow. Vain his flight; within twenty yards the infuriated victims of the seeming deception had overtaken, slain, and eaten up the cruel deceiver! Undoubtedly he had told them of the magnificent feast awaiting them, and proffered to lead them to where it was.'

THE SOUTHAMPTON ARTESIAN WELL.

SOME forty-five years ago, the town of Southampton, being in want of a regular supply of potable water, resolved upon the experiment of an Artesian well, encouraged thereto by certain local circumstances which appeared to favour such an undertaking. At Winchester, Hursley, Portsmouth, and on Portsdown Hill, the tapping of the chalk had produced abundant supplies of excellent water, not to say that the geological basin at Southampton was believed to be in many respects identical with that in which the celebrated Artesian well in Paris is constructed. A good deal of the water-supply of the town being at the time obtained from surface-drains and springs on the Common, an outlying piece of park-like land, of four hundred acres, forming the root of the tongue on which the town—situated between the rivers Itchen and Test—stands, an experimental boring was made by a London engineer, who predicted that at a depth of four hundred and eighty feet, an unfailing and almost unlimited supply of water was to be obtained from the chalk—to reach which at this depth, eighty feet of

alluvial strata, overlying three hundred feet of London clay and a hundred feet of the plastic clay formation, were passed through.

Thus encouraged, the Water-works Commissioners selected what was thought a more convenient site for securing the discharge of the water, and, at an estimated cost of seven thousand pounds, commenced the construction of a well to supply forty thousand cubic feet of water per day. A shaft fourteen feet in diameter was commenced, and sunk one hundred and sixty feet, at which depth it was originally proposed to commence boring; but this plan was altered, and the shaft, reduced to eleven feet six inches, was carried down to two hundred and fourteen feet, when it was further reduced to eight feet six inches, to a depth of three hundred and twelve feet. Here it was found necessary to substitute iron cylinders for the brickwork to three hundred and twenty-two feet, where the brickwork was resumed, the diameter being reduced to seven feet. The plastic clay being reached at three hundred and eighty feet, the brickwork was continued down to three feet below the chalk stratum, found at five hundred and twenty feet. Here the water was found flowing into the well at the rate of about three gallons a minute; and its temperature being taken, it was found to range from sixty-one to sixty-two degrees Fahrenheit, its temperature at the surface being forty-four degrees; and the atmosphere of the well at fifty feet, fifty-four degrees; at one hundred and sixty feet, sixty degrees; and at five hundred and forty-three feet, sixty-five degrees. Five hundred and sixty-two feet having been reached, and nothing like the supply expected having been obtained from the fourteen water-bearing deposits tapped (and stopped out), boring was commenced with a seven and a-half inch auger, and was continued until thirteen hundred and seventy-three feet was reached, when some twenty thousand pounds having been spent on the experiment, the townspeople's patience became exhausted. Despite the advice of the *savants* who visited the town with the British Association in 1846, to 'go on,' Sir Roderick Murchison being among those who inspected the works and a carefully-kept diagram of the geological formation passed through, and who, speaking on the spot, said, from his special experience of Hampshire, 'that there was a subterranean river flowing beneath them, there could be no sort of doubt, in 1851 the well was closed.

The town not being content with its water-supply, which practically comes from the Itchen river, after passing Winchester and several villages on its course to the Southampton Water, and the question coming before the corporation again coincident with the recent visit of the British Association, advantage was taken of its presence once more to ventilate the subject. As the result, the corporation have resolved to spend a sum of one thousand pounds or more experimentally in continuing the boring, it being believed that it will be necessary to go no deeper than from two hundred and twenty to three hundred and twenty feet more in order to reach the lower greensand; the upper greensand, the geologists aver, being only from twenty to fifty feet below the boring, and the upper greensand and the gault but from one hundred to one hundred and fifty feet each in thickness.

The preliminary preparations for continuing the experiments have proved more favourable than even the most sanguine had hoped. When the well was opened, everything was found as it was left thirty-one years ago, the difference being, that the water had risen somewhat higher, and had reached the staging where the boring-tools were fixed, forty feet from the surface. At the request of the Underground Temperature Committee of the British Association, two local gentlemen, on the well being opened, descended to this stage, and, to their great delight, found the bore practically unchoked to within a hundred feet of the bottom, which in their opinion consists of a deposit of ooze. The Association had forwarded for the experiment a Negretti and Zambra's mining thermometer, inclosed in a copper case, and specially tested and corrected. To protect this instrument, and also as a sinking-weight to carry it through any possible obstructions in the bore-shaft, it was placed in an elongated perforated tubular case, attached to about fourteen pounds of metal, with a conical termination downwards. This being attached to one of Sir William Thomson's patent sea-sounding registers, carrying three hundred fathoms of steel wire and registers, was placed in the mouth of the bore-shaft; and for upwards of fourteen minutes, with but several slight obstructions in the upper chalk, passed steadily down to twelve hundred and ten feet, where, the chalk ooze being met with, it was thought advisable to take the thermometrical observations. The temperature of the air being forty-nine degrees Fahrenheit, and of the surface-water in the well fifty-five degrees Fahrenheit, the temperature at the bottom, after thirty-five minutes' stay, when the hauling-up began, was registered as seventy-two degrees Fahrenheit, or twenty-three degrees above that of the outer air. The eventual result, with the interesting facts dependent on it, cannot now be long delayed, though the contractor for continuing the work, having cleared the bore apparently to its bottom, has come upon an obstruction which, for the moment, he seems unable to penetrate, and special professional advice is being sought in the matter.

THE MONTH.

SCIENCE AND ARTS.

At the late general annual meeting of the Royal Geographical Society, Professor Huxley asserted that it and kindred Societies were growing a little dull. He did not state this with any feeling of reproach, but merely as a fact arising from the general progress of knowledge. With regard to geographical research, there is little doubt that few places remain where the explorer has not planted his foot. Greenland is at the present moment an exception; but as Baron Nordenskjöld has now started on his mission there, some particulars of which we gave last month, it will not long be regarded as terra incognita. Baron Nordenskjöld's expedition has been organised and equipped at the expense of a private individual, Mr Oscar Dickson, whose name is well known as a liberal supporter of any scientific inquiry which needs the help of money. We hear much in this country of the outcry that government should

endow research; but would it be impossible to find one or two wealthy men who would, like Mr Oscar Dickson, quietly take the matter in hand? A paragraph went the round of the papers a short time ago, giving the numbers of men who had died within the last two or three years leaving, respectively, their millions, half-millions, and quarter-millions. The names of such are not remembered for any particular good they had done, except the final act, which they could not well avoid, of leaving their riches for others. The name of Oscar Dickson of Gottenburg will be of far more lasting memory, and his present reward must be great, in seeing the growing results of his good works. Surely there are men in Great Britain who would go and do likewise, if the need were pointed out to them.

The Grocers' Company has set a good example in offering prizes for original research. The first 'discovery prize' of the kind amounts to a thousand pounds, and the subject is as follows: 'A method by which the vaccine contagium may be cultivated apart from the animal body, in some medium or media not otherwise zymotic; the method to be such that the contagium may by means of it be multiplied to an indefinite extent in successive generations, and that the product after any number of such generations shall—so far as can within the time be tested—prove itself of identical potency with standard vaccine lymph.' In briefer terms, this prize is offered for an improved method of vaccination, by which the remote chance of blood-poisoning—so much exaggerated by anti-vaccination agitators—is altogether avoided. Should this result not be actually attained, the experimental work which the endeavour will call forth, will in itself be most valuable.

Signor Pavesi is credited with the discovery of a new method of preserving meat from putrefaction, which, if as efficacious as stated, will be of immense value to society at large. The meat is simply immersed in a bath of water slightly acidulated with nitro-muriatic acid. Thus treated, it will keep good for many months, and when required for use, must be dried at a temperature of sixty degrees Fahrenheit. A brown tint is given to the meat by the acid; but this is readily removed by soaking in plain water before the drying process.

At the Royal Scottish Society of Arts, a paper was recently read by Mr C. A. Stevenson, C.E., describing a new and very simple form of Seismograph—an instrument, we may remind our readers, for automatically recording earth-tremors. In the year 1872, a Committee of the British Association reported that 'some simple and cheap method of indicating earthquake movement is much to be desired, and that any apparatus for the purpose should occupy small space, be little liable to derangement, capable of being put up in an apartment not of special construction, and its indications such as any intelligent person could easily interpret and readily note.' Mr Stevenson's contrivance seems fully to answer all these requirements. It consists of two pieces of plate-glass five inches square. One of these is carefully levelled, and upon it stand three little ivory balls, which in their turn support the other glass plate. To this latter is fastened a horizontal arm, with a vertical needle at its end. The point of this

needle rests upon a lamp-blackened surface, so that the slightest movement of the upper glass plate, together with the direction in which it moves, is recorded by a scratch on the blackened surface.

Although the photographic camera has been aptly described as 'a retina which never forgets,' and although we know that the image it produces is true as to form, it is within the experience of everybody that photographic portraits are not always good likenesses. We are inclined to attribute this failing to the circumstance that by photography it has hitherto been found impossible to give colours their true *shade-value*, if we may invent a term to serve our purpose. What we mean is this: yellow to the eye is a brilliant light tint; but in a photograph it is reproduced almost black. Red, instead of giving the idea of fire and light, comes out black. Blue photographs perfectly white. Such changes of course play sad havoc with complexions and contrasts of colour generally; and persons with hair and skin exhibiting exceptional brilliancy of colouring, are quite justified in remarking: 'I never make a good photograph.' According to a note brought before the Photographic Society of France the other day, this stigma upon photographic portraiture is not to remain. By the addition to the usual ingredients of the sensitive photographic surface of one per cent. of eosine, the difficulties which we have described can be altogether obviated.

We need hardly point out that this modification has nothing whatever to do with the realisation of that dream which many have pondered over, the production of photographs in natural colours. We are of opinion that this must remain at present, if not for ever, an impracticability. In the meantime, we must content ourselves with such artificial methods of colouring as are contrived from time to time. A modification of the fashionable crystalline process—fashionable, alas! because it requires no artistic power—has been patented by Mr J. W. Hyman of New Jersey. The photograph printed in the usual manner on paper, is first of all immersed in a mixture of naphtha, paraffin, mastic drops, ether, and vinegar. This treatment makes it quite transparent, so that body-colours in oil, if laid broadly in their proper places on the back of the picture, show through with very good effect. By fixing the finished picture upon canvas with a mixture of glue and glycerine, a very close imitation of an oil-painting can be produced.

The difficulty of protecting our costly ironclad ships of war from the insidious attacks of the terrible torpedo, has called forth a vast number of contrivances for the protection of ships' hulls, which are as a rule far more ingenious than practicable. Sir Edward Reed, the designer of both ships and torpedo vessels, and who therefore well understands the relationship between the two, has attacked the problem from a new stand-point. He proposes to build ironclad ships on such a principle that their outer hulls, divided into numerous water-tight compartments, will act as a protection to the real ironclad hull within. These improvements are embodied in certain patent specifications, to which as yet 'provisional protection' only has been granted.

The torpedo, like certain infernal machines

of which we have constant alarming descriptions, does not appear to be so formidable a weapon as some suppose; at least, we may say so of that type of torpedo which, like the 'Whitehead,' is no longer under control when it has left its mother-ship. We are reminded of this by a strange accident that recently occurred to a gentleman's yacht which happened to be lying within half a mile of some dummy torpedo practice at Portsmouth. The crew of the yacht were below, when they felt a heavy collision. On reaching the deck, they saw a Whitehead torpedo with its tail in the air busily engaged in boring a hole through their planking two feet below the water-line, causing the yacht to run a very narrow risk of sinking. Here we have one more instance to add to the many already known, of the erratic course indulged in by these new weapons, and one which would seem to indicate that the costly things, if they hit anything at all, are quite as likely to choose a friend as a foe.

In the Machinery department of the London Fisheries' Exhibition, one of the most striking novelties shown is the method of making barrels, firkins, and kegs without the intervention of a skilled cooper. It would be impossible in the space at our disposal to even briefly describe the various machines involved in the process. They are six in number, and are patented by A. Ransome & Co., a firm well known for wood-working machinery. The casks are turned out with wonderful celerity, and are perfect in form. A set of machines costing seven hundred pounds, including the necessary engine, boiler, shafting, &c., will, it is calculated, pay its own cost if kept continually at work for six months. Such a set will produce two thousand half-hundredweight butter firkins per week, and can be worked by two men and eight lads, each machine-made firkin costing for labour twopence-halfpenny. The usual price paid to skilled coopers for making such firkins varies according to the locality and the state of trade—between sixpence and ninepence.

In the Life-saving section of the same Exhibition is shown a simple little contrivance for stopping holes in ships, which has been before the public for one or two years, and has during that time been instrumental in saving more than one vessel from destruction. It is known as J. W. Wood's self-adjusting rivet-hole and leak stopper, and is applicable to ships, buoys, boilers, torpedo boats, &c. It consists of an iron disc covered with felt, which screws on to a rod at the end of which is a jointed T-piece. Supposing that a shot-hole in a ship's side has to be stopped, the T-piece is thrust through the opening, and the jointed piece put crossways, so that it cannot be readily withdrawn. The felt disc is now slipped over the rod and screwed firmly as far as it will go, and the operation is complete. The discs, of various sizes and shapes, are supplied to the Admiralty, and are coming into extensive use in the merchant service. The importance and efficiency of this invention have been recognised by the Society of Arts by the grant of their Albert silver medal.

The rapid advance of the telephone in public favour has naturally, within the last few years, caused inventors to turn their attention to it, and many patents have been granted to improvements,

or supposed improvements, upon the original instrument. We fear that many of these later workers have met with disappointment; for the patents of Edison and others cover so much ground, that it is almost impossible to produce anything in the shape of a telephone that a court of law will not hold to represent an infringement. Mr J. Munro of West Croydon, a well-known writer upon matters electrical, has, however, managed to produce an efficient telephone transmitter, which, although founded upon Professor Hughes's microphone, is so different in detail and material from anything previously brought forward, that the sharpest lawyer would find it difficult to upset his title to originality. Unlike other transmitters, this one employs no tympan or diaphragm, and dispenses with that philosopher's stone of electricians, carbon. In its simplest form, it consists of two little squares of iron wire-gauze, one placed vertically, and the other leaning against it, the contact of the two being regulated by a spring. This simple device, in connection with a battery and telephone receiver, is quite sufficient to act as a faithful messenger between two distant speakers. Mr Munro has further carried out some experiments of a highly original and suggestive character, which may possibly lead up to important discoveries in electrical science.

A very unusual amount of damage resulted from a thunderstorm which passed over the city of New York in May last. At the works of the National Docks and Storage Company, in the south-west of the city, stood twenty-seven large tanks for the storage of petroleum. These tanks were made of brick, but were plated outside with iron. With a deafening roar, one of the tanks was struck by the lightning. A sheet of flame one thousand feet high rose in the air, and the burning liquid was scattered in every direction, firing the remainder of the plant, including warehouses, docks, buildings of all kinds, and railway cars. Everything in one moment seemed to be involved in ruin, and we regret to say that six people lost their lives. This catastrophe will probably call attention to the possibility of devising some form of special protector for oil-tanks. The usual form of rod-conductor would seem to be insufficient for the purpose, especially as there is danger of the oil, and the inflammable gas above it, being fired through the iron pipes leading to the ground.

In Bavaria and Württemberg, thunderstorms and their attendant phenomena have for some time been carefully observed and recorded, and the means by which this has been done are so simple and effective, that they could be readily adopted in any country without difficulty or expense. People nowadays take such interest in weather predictions and meteorological observations generally, that there would be no difficulty in obtaining volunteers to help in the work. In Württemberg, a band of two hundred and eighty unpaid observers have undertaken to make notes of every storm occurring in their various districts, such as the exact time when the first lightning-flash is seen, its distance, intensity, and so on. For this purpose, they are furnished with post-cards, which have free delivery at headquarters. In this way, a vast amount of valuable information has been gained as to the gradual formation

of storms, and the manner in which their formation is influenced by local causes.

A writer in *Good Words* expresses a wish that school children should be taught something about the habits and food of our wild-birds, more especially of our little feathered songsters, so that they might be induced to protect rather than persecute them. As instances of the amount of good these birds are capable of in carrying out their natural work of keeping in check many of the farmers' pests, he remarks that a thrush is so voracious that he will consume at one meal an enormous snail. A man endowed with corresponding appetite could eat a whole round of beef for his dinner. A redbreast to be kept in good condition requires every twenty-four hours an amount of animal food equal to fourteen feet of earthworm. This would be equal to a man devouring a sausage nine inches in circumference and sixty-seven feet long. We quite agree with the writer that if such facts were properly brought before our little scholars, and certain children of larger growth as well, convincing them that the birds are such valuable aids to man, they would soon cease to regard them as things to be hunted and stoned.

Messrs Neujean and Delaite, of Liège, have recently introduced a process for galvanising iron, which is likely to prove useful in dealing with large castings which cannot be dipped in a bath of molten zinc in the usual manner. A kind of paint is made up, consisting of zinc in impalpable powder, linseed oil, and driers. With this mixture, applied with a paint-brush, the metal is coated once or twice. This treatment gives it an iron-gray tint, which can subsequently be bronzed, or painted any colour, as desired. Another method of treating metal has been invented by Dr Gehring of Landshut, who coats iron with aluminium instead of zinc. The process is said to be simple and inexpensive, and to permit of making the metal highly ornamental. No details are as yet published concerning the process.

We are indebted to another American journal for a recipe for treating wood in contact with the ground, and which ought to be found useful for telegraph posts, railway sleepers, gateposts, and many other purposes. 'Take,' says the writer, 'boiled linseed oil, and stir in pulverised coal (bituminous or anthracite) to the consistence of paint. Put a coat of this over the timber, and there is not a man that will live to see it rot.' We may note in this connection that the London and North-western Railway Company are laying down ten miles of permanent way with new sleepers made of steel. The cost is said to be not much in excess of creosoted wooden sleepers with their attachments to hold the rails in position. But many years must elapse before the economy of the new system is demonstrated.

Although the tricks of trade are various, and processes of adulteration often rise to the position of a fine art, there are yet many things upon this earth that would seem safe from sophistication. The sparkling diamond would at first sight seem to be one of these, for its properties are so well known, and tests, microscopical and otherwise, so easily applied, that to a skilled eye a spurious stone could not pass as genuine. But there is an

opening for the ingenious trickster in the facts that some diamonds are far more valuable than others, and that if the yellow African diamond can be made to look like its relative of steel-blue purity, it will at once rise to many times its original value. This result has been achieved in the most ingenious and scientific manner. The complementary colour to yellow is violet, and by a well-known optical law, two complementary colours produce white; so the ingenious but fraudulent trader drops his yellow gems for a few minutes into a solution of aniline violet. The tinge which they retain of that colour counteracts their sallowness, and to all appearance they have been transformed into gems of the purest water. Fortunately, the application of soap destroys the illusion, and exposes the fraud.

Mr Hans Freeman, who for many months has been endeavouring to find evidence as to the whereabouts of the rich lodes of tin spoken of by the old Spanish settlers in Mexico, has at last succeeded in his search. As a result, the first ton of Mexican tin has just found its way to the United States. It is said to be of good texture and colour, and to possess all the characteristics of the best metal. It came from the Durango district, near the mountains of the same name.

The gradual extermination of the elephant, and consequent scarcity of ivory which we have more than once deplored, has had the effect of stimulating inventors to find a substitute for that very useful and elegant material. The most perfect substitute hitherto produced is the compound called celluloid. Billiard and bagatelle balls made of celluloid now form a recognised industry, and a large factory for their production is established at Albany, New York. The celluloid as received at this factory is in large sheets. It is cut into half-inch cubes, and roughly moulded into balls under an hydraulic pressure of two thousand pounds to the square inch, heat being applied during the process. These balls are afterwards accurately turned in a special form of lathe. They can be produced at a fraction of the price paid for true ivory.

OCCASIONAL NOTES.

WEIGHING-MACHINES.

ANY one not connected with the postal service would be surprised to find how many and various are the arrangements that must be made and perfected before such an undertaking as the parcels post can be brought into successful operation. One of the first requirements are weighing-machines, and as each parcel receiving-office in the kingdom must have at least one, and the larger ones several, some idea may be formed of the number needed for this purpose alone. Our daily business and private requirements necessitate the constant use of weighing-apparatus of some sort.

We have lately had the opportunity—through the kindness of Messrs W. & T. Avery of Birmingham—of inspecting their extensive manufactory of weighing-machines, a short account of which may be found of interest. This manufactory was established in 1730, and produces weighing-machines of every description, capable of weighing

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from one-thousandth of a grain up to sixty or eighty tons.

Weighing-apparatus may be classed as follows :

1. Beams, consisting of a bar of metal suspended freely in the middle, and varying in length from four inches to eight or ten feet, carrying scales suspended from the extremities by chains. They have the advantage of extreme simplicity and sensitiveness, and for delicate weighments are unequalled by any other form of apparatus. For large weighments (from one to forty hundred-weights) they are rather inconvenient, taking up much space, having scale-chains in the way, and requiring the handling of heavy weights for each weighment. The pin or pivot on which a beam turns is called a 'knife edge,' and generally rests on a bearing of hardened steel, but even the best tempered steel is cut in time by the action of the knife edges, and the accuracy and sensitiveness of the beam destroyed. To obviate this defect, the Messrs Avery make use of highly polished agate, which takes the place of the steel-bearing, and makes a wonderful difference in the sensitiveness and lasting quality of the beams to which the stone is applied. A large beam capable of weighing one hundred pounds turns with a single grain.

2. *Steelyards*.—These consist of a single lever with unequal arms; a small weight on the long arm balancing a vastly greater one on the short arm. They are made for weighing from a few pounds to twelve tons. The smaller ones have one-ounce divisions, and are much used by butchers. They seemed to have been used in very ancient times. The writer was shown some specimens in the museum of Naples which were discovered in the ruins of Pompeii.

3. *Counter-machines*.—In these machines a double beam is carried on a cast-iron stand; above the beam, at each extremity, are the scales. No chains are in the way, and weighment can be made with great quickness and accuracy. This class of machine is intended to weigh from an ounce to one hundred and twelve pounds. For the parcels post the government have selected a counter-machine nominally to weigh up to seven pounds, but from its strength, design, and workmanship, quite equal to weighing four times the nominal amount. So sensitive is this machine, that, balanced with seven pounds in each scale, a few grains added to either scale will depress it. The parcel scale is made of sheet copper turned over and wired at the edges, to increase its strength and rigidity. All the parts are made by machinery on the interchangeable principle. Messrs Avery are great believers in machinery, and though the actual cost of things so produced is in some cases not much less than by hand, the accuracy and power of production is vastly increased. They have machinery for forming, cutting, shaping, and punching every part of their different apparatus, and it is wonderful how quickly the different machines do their work, acting upon iron or brass as if it were soft wood. Division of labour seems to be carried to an extreme. The men engaged on one sort of weighing-machine would be useless on another. About eleven hundred machines per week have been recently turned out for the postal service alone.

4. *Weigh-bridges* so termed, and used for weighing from two to eighty tons. These consist of

a combination of levers, supporting a platform on which the goods are weighed, and connected with a steelyard or beam on which a movable weight is placed. The steelyard for the larger weigh-bridges—ten to eighty tons—is marked in one-pound divisions.

5. The platform-machine, generally used for all weighments from a few pounds to twenty hundred weights, consists of a combination of levers, much the same in principle to those used for the weigh-bridge, but much smaller, inclosed in an iron case, and often mounted on wheels for convenience of transport. The weigh-bridge and platform-machine weigh quickly and accurately; they dispense with the use of heavy weights, a weight of one pound or so on the steelyard balancing several tons or hundred weights on the platform, according to the leverage employed. Messrs Avery have recently devised an apparatus by which a 'platform-machine' or weigh-bridge is made to print on a ticket the weight of the article weighed, thus providing an admirable check on fraud or errors.

INLAND PARCELS POST.

With regard to the new system of parcels post, the Postmaster-general has issued a notice stating that parcels will be accepted for transmission by the inland parcels post under the following general conditions in regard to weights, dimensions, and rates of postage, namely :

For an inland postal parcel of a weight of not exceeding 1 lb., the rate of postage, to be prepaid in ordinary postage-stamps, will be 3d.

Exceeding 1 lb. and not exceeding 3 lb., 6d.

Exceeding 3 lb. and not exceeding 5 lb., 9d.

Exceeding 5 lb. and not exceeding 7 lb., 1s.

The dimensions allowed for an inland postal parcel will be :

Maximum length, 3 feet 6 inches.

Maximum length and girth combined, 6 feet.

Examples.—A parcel measuring 3 feet 6 inches in its longest dimension may measure as much as 2 feet 6 inches in girth, that is, around its thickest part; or

A shorter parcel may be thicker—for example, if measuring no more than 3 feet in length, it may measure as much as 3 feet in girth, that is, around its thickest part.

The regulations under which certain articles are prohibited from transmission by the letter post will, with a few exceptions, apply equally to the parcels post. For instance, gunpowder, lucifer-matches, anything liable to sudden combustion, bladders containing liquid, and live animals, will be excluded from the parcels post. But glass bottles, fish, game, meat, and all other articles not above-mentioned, now excluded from the letter post, will be admitted to go by parcels post conditionally upon their being packed and guarded in so secure a manner as to afford complete protection to the contents of the mails and to the officers of the Post-office.

THE VALUE AND USES OF AMBER.

In this *Journal* for April 1, 1882, we gave an article on the subject of Amber; and the following additional particulars, from the *Builder*, may be of interest :

'The commonest impure kinds of amber are

used to make varnish; and the demand for the more valuable kinds, which are employed for necklaces, pipe mouthpieces, and other purposes, is such as to make an amber mine a source of great wealth. The largest European amber deposits are found on the Baltic shores of North-eastern Prussia. There, about eighty tons a year are at present dug up, and the supply appears practically inexhaustible. Since the beginning of the century, it is calculated that over sixteen hundred tons have been produced there; and if the production, as some contend, has been going on for three thousand years, the total quantity produced in that period cannot, it is calculated, have been less than sixty thousand tons. The amber is found in isolated pieces, varying from the smallest beads up to blocks of many pounds in weight. The largest piece ever discovered weighs thirteen and a half pounds, and is now in the Royal Mineral Cabinet in Berlin. Amber is the fossil resin produced by upwards of six kinds of coniferous trees in prehistoric times. Two of these trees, of which immense forests covered the regions now producing amber, have been proved to be nearly related to the existing Weymouth pine and the modern fir-tree. While the wood of the trees rotted away, the resin which exuded from them has been preserved in the form of the fossil amber. The resin oozed out of the stem of the tree as well as out of the roots, and was deposited eventually in immense quantities in the soil. In some of the pieces of the amber, bits of the wood and bark of the trees are found imbedded, and through this lucky accident, have been preserved from decay. On examining this wood with the microscope, it is at once apparent that the trees were, as intimated above, closely related to our modern coniferae, but were not absolutely identical with any of the existing species. Ages ago, the whole region now covered by the eastern part of the Baltic Sea was covered with these amber-producing trees. The industry of amber-digging is one of very great importance for Prussia, and it is calculated that the amber district of that country still contains a quantity which, at an average value of five shillings per pound, is worth no less than two hundred and fifty million pounds sterling.

CONSUMPTION: THE SOOTHING INFLUENCE OF HOT WATER.

A Canadian correspondent writes: Noticing an extract from the *World of Science* in which a physician strongly recommends hot water, in place of tea or coffee, as a stimulant for the use of those requiring to study late at night, I would like to give my experience of it as a beneficial agent in consumption. Mrs H—, one of a family a number of whose members had died of consumption, was, after severe exposure to a snowstorm, seized with a serious cough and expectoration, accompanied with loss of flesh. Examination by a physician showed that one lung was seriously affected. She was wholly confined to her room; and everything that medical attendance and loving care could do to mitigate her suffering was done, but ineffectually. The depressing night-sweats continued, together with loss of rest from repeated fits of coughing. Losing all faith in medicine, some six or eight months

ago, its use was wholly abandoned, and the use of nourishing diet only, continued.

About ten weeks ago, the patient's attention was directed to a newspaper paragraph recommending hot water as a remedy for consumption. Feeling that little harm could ensue from its use, she determined to test it. At the moment of retiring, a large tumbler of hot water, in which the juice of a lemon had been mixed to free it from nausea, was taken. In a few moments, a glow of warmth would pervade the lungs, chest, &c., quickly followed by the most refreshing sleep, which would be unbroken by any cough, and the patient would awake in the morning rested and strengthened.

A few days ago, she was seized with a fit of coughing, during which was coughed up into her mouth a small stone about the size of a pea—formed of sulphate of lime, I believe, and usually considered a symptom of the healing of a cavity in the lung.

Whether this marked improvement was due to the use of the hot water, I cannot venture to say; but its beneficial influence in securing sweet sleep and exemption from coughing at night was so marked, that I would like some of your readers to test it with their consumptive friends, and give, through your Notes, the results of their experience.

LOVE AND FAME.

The poet's soul that had the honey pressed
From man and life,
On eager wings had gone to seek her rest
Far from earth's strife.

Fame said to Love: 'The poet's soul is mine.
'Tis mine to bring
To my eternal fields the voice divine
That thus could sing.'

Love answered: 'Though thy claim I now confess,
'Twas I did give
His verses all the fire and gracefulness
Whereby they live.'

J. WILLIAMS.

The Conductor of CHAMBERS'S JOURNAL begs to direct the attention of CONTRIBUTORS to the following notice:

- 1st. All communications should be addressed to the 'Editor, 339 High Street, Edinburgh.'
- 2d. For its return in case of ineligibility, postage-stamps should accompany every manuscript.
- 3d. MANUSCRIPTS should bear the author's full Christian name, Surname, and Address, legibly written; and should be written on white (not blue) paper, and on one side of the leaf only.
- 4th. Offerings of Verse should invariably be accompanied by a stamped and directed envelope.

If the above rules are complied with, the Editor will do his best to insure the safe return of ineligible papers.

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